

FCR 16

Office of the President
December 13, 2005

Members, Board of Trustees:

PATENT ASSIGNMENT REPORT

Recommendation: that the Board of Trustees accept the patent assignment report for the period ending October 31, 2005.

Background: The March 4, 1997 meeting of the Board of Trustees authorized the University of Kentucky Research Foundation to conduct all future copyright and patent filings and prosecutions. Quarterly reports on patent and copyright applications are to be submitted to the Finance Committee of the Board.

Action taken: Approved Disapproved Other _____

PATENT ASSIGNMENT
QUARTERLY FOR THE PERIOD AUGUST 1, 2005 THROUGH OCTOBER 31, 2005

Patents

The following assignments on behalf of the Board of Trustees of the University of Kentucky Research Foundation have been executed:

1. **U.S. Patent Application Serial Number: (to be assigned)**

Filed: August 26, 2005

Title: "AMYLOID PEPTIDE INACTIVATING ENZYME TO TREAT ALZHEIMER'S DISEASE PERIPHERALLY"

Inventors: Drs. Louis B. Hersh and Hanjun Guan (Department of Biochemistry)

Technical Description: The present invention relates to methods of preventing amyloid peptide (AP) accumulation and plaque formation in the brain by raising amyloid peptide inactivating enzyme activity in the periphery. The present invention also relates to methods of lowering plasma A β levels as a way to lower brain A β using expression of amyloid peptide inactivating enzymes, like neprilysin, on hematopoietic cells. The present invention also relates to a method of treating and/or preventing Alzheimer's disease.

Summary: It is widely believed that the debilitating symptoms of Alzheimer's disease are caused by the abnormal buildup of amyloid peptide in the brain, ultimately causing the destruction of brain cells. The inventors propose a method of preventing the abnormal buildup of amyloid peptide by increasing the activity of neprilysin, an enzyme that inactivates amyloid peptide. The inventors anticipate that this will result in a decrease in the likelihood of developing Alzheimer's disease.

2. **U.S. Patent Application Serial Number: (to be assigned)**

Filed: August 9, 2005

Title: "COMPOSITIONS AND METHODS FOR INHIBITING DRUSEN COMPLEMENT COMPONENTS C3A AND C5A FOR THE TREATMENT OF MACULAR DEGENERATION"

Inventor: Dr. Jayakrishna Ambati (Department of Ophthalmology).

Technical Description: This invention relates to compositions and methods for treating and/or preventing age-related macular degeneration (AMD). More particularly, the invention relates to the use of antagonists and antibodies to activated complement component 3 (C3a) and/or its receptor (C3aR), and activated complement components 5 (C5a) and/or its receptor (C5aR) to reduce vascular endothelial growth factor (VEGF) expression and inhibit choroidal neovascularization (CNV). This invention also relates to an assay for the detection of C3a, C3aR, C5a and/or C5aR as a predisposition for and/or early detection of AMD.

Summary: AMD is the leading cause of vision loss in the elderly. The majority of vision loss in AMD is the result of the abnormal overgrowth of blood vessels in the eye. The inventors propose the use of compounds that prohibit the overgrowth of blood vessels to prevent AMD.

Patent Activities
Fiscal Year 2005-06 to date as of 10/31/05

Number of Patent Applications	2
Number of Patents Issued	5
Patent Income	\$338,105